

# Work Order ID 61004

August 4, 2010 8:10:38 AM



Page 1

Item ID: D3651-041

Accept



Setup

Start



Revision ID:

Stop



Item Name: Aft Base Assembly

Start Date: 8/04/10

Start Qty: 1.00



Cust Item ID:

Required Date: 8/06/10

Req'd Qty: 1.00



Customer:

Reference:

Run

Start



Approvals:

Process Plan:

Date:

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

Draw Nbr

Revision Nbr

D3651

Rev B

100

Pick Kit

0.00



Packaging

Memo

0.00

Packaging

SB 10/08/02

①

110

Small Fab

0.00



Small Fab

Memo

0.00

Small Fab

1-Assemble as per dwg D3651 2- Seal all mating surfaces and gaps using  
Proseal 700 fire wall sealant as per dwg D3651 Batch: M113363-Install  
D3651-1 using 3M high performance contact adhesive 1357 as per dwg  
D3651 Batch: M105623

ES 10/08/05

120

QC5- Inspect part completeness to step on W/O

0.00



QC

Memo

0.00

Quality Control

S 10/08/05

④

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Work Order ID 61004

August 4, 2010 8:10:38 AM



Page 2

Item ID: D3651-041

Accept



Setup

Start



Revision ID:

Stop



Item Name: Aft Base Assembly

Start Date: 8/04/10

Start Qty: 1.00



Cust Item ID:

Required Date: 8/06/10

Req'd Qty: 1.00



Customer:

Reference:

Run

Start



Approvals:

Process Plan:

Date:

Tooling:

Date:

Stop



QC:

Date:

SPC (Y/N):

Date:

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

130



Packaging

Packaging

Identify as per dwg & Stock Location: GA

0.00

Memo

0.00

MF

10-8-05

140



QC

Quality Control

QC21- Final Inspection - Work Order Release

0.00

Memo

0.00

10/08/05

MF

10-8-05

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

August 4, 2010 8:10:36 AM

Page 1

Work Order ID: 61004

Parent Item: D3651-041

Parent Item Name: Aft Base Assembly





Start Date: 8/04/10

Start Qty: 1.00

Required Date: 8/06/10

Required Qty: 1.00

Comments: IPP Rev:A New Issue 07-09-27 DD verified by: EC  
IPP Rev:B ECN 1113P 08-01-22 DD verified by: EC  
IPP Rev:C ecn1162 08-04-02 DD verified by: EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
CR3523-4-02  RIVET		Purchased	No			100	Each	213.0000	58	58			
<div> <div>Location</div> <div>Loc Qty</div> <div>Loc Code</div> </div>													
<div> <div>ST313</div> <div>4</div> <div>1113069</div> </div>													
<div> <div>112794</div> <div>13</div> <div></div> </div>													
<div> <div>113064</div> <div>200</div> <div></div> </div>													
D3651-043  Flange Weldment		Manufactured	No			110	Each	2.0000	1	1			
<div> <div>Location</div> <div>Loc Qty</div> <div>Loc Code</div> </div>													
<div> <div>ST189</div> <div>2</div> <div></div> </div>													
<div> <div>45830</div> <div>2</div> <div></div> </div>													
D3651-1  Gasket		Manufactured	No			110	Each	5.0000	1	1			
<div> <div>Location</div> <div>Loc Qty</div> <div>Loc Code</div> </div>													
<div> <div>ST188</div> <div>5</div> <div></div> </div>													
<div> <div>45831</div> <div>5</div> <div></div> </div>													
D3651-11  Gasket		Manufactured	No			110	Each	4.0000	1	1			
<div> <div>Location</div> <div>Loc Qty</div> <div>Loc Code</div> </div>													
<div> <div>GA</div> <div>4</div> <div></div> </div>													
<div> <div>44675</div> <div>1</div> <div></div> </div>													
<div> <div>45452</div> <div>3</div> <div></div> </div>													

4

13

1

1

1

1

1

1

SB 10/8/5

SB 10/8/5

SB 10/8/5

SB 10/8/5

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

August 4, 2010 8:10:37 AM

Page 2

Work Order ID: 61004



Parent Item: D3651-041



Parent Item Name: Aft Base Assembly

Start Date: 8/04/10

Required Date: 8/06/10

Start Qty: 1.00

Required Qty: 1.00

D3651-13      Manufactured      No

110      Each

2.0000

1      1



Outside Doubler



Location

Loc Qty

Loc Code

GA

2

44676

2

D3651-9      Manufactured      No

110      Each

3.0000

1      1



Inside Doubler



Location

Loc Qty

Loc Code

ST188

3

45451

3

SB 10/6/15

SD 10/6/15

August 4, 2010 8:10:37 AM

Shop Packet Print

Page 2

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

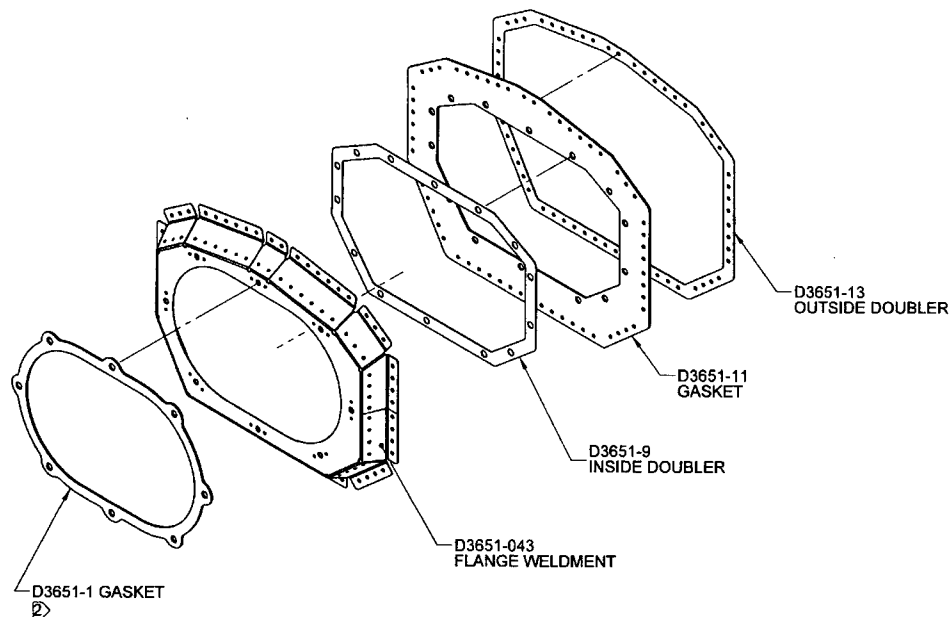
Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

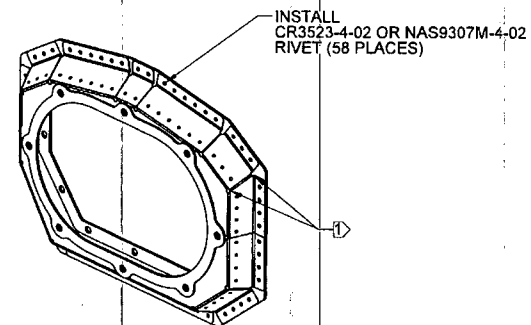




**D3651-041 AFT BASE ASSEMBLY**

**D3651-041 NOTES:**

- 1) SEAL ALL MATING SURFACES AND GAPS USING PROSEAL 700 FIRE WALL SEALANT
- 2) INSTALL D3651-1 USING 3M HIGH PERFORMANCE CONTACT ADHESIVE 1357
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 1.6 lbs



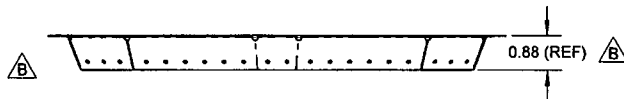
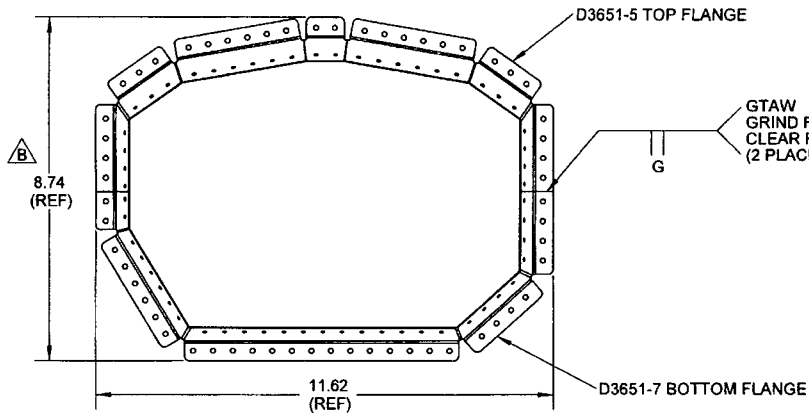
**PART LIST**

QTY -041	PART NUMBER	DESCRIPTION
X	D3651-041	AFT BASE ASSEMBLY
1	D3651-043	FLANGE WELDMENT
1	D3651-1	GASKET
1	D3651-9	INSIDE DOUBLER
1	D3651-11	GASKET
1	D3651-13	OUTSIDE DOUBLER
58	CR3523-4-02 or NAS9307M-4-02	RIVET

B	SHEET 1: GENERAL UPDATE SHEET 2: 8.74 WAS 8.50; 0.88 WAS 0.98, REMOVED ANGLE SHEETS 4, 5, 6, 8 & 9: GENERAL DIMENSIONAL UPDATE SHEET 7: 5.514 WAS 5.504		RF	08.01.07
A	NEW ISSUE		RF	07.11.07
REV.	DESCRIPTION		BY	DATE
DESIGN	RF	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA		
DRAWN	RF			
CHECKED	RF	DRAWING NO. <b>D3651</b>	REV. B	
MFG. APPR.		TITLE <b>AFT BASE ASSEMBLY</b>	SCALE 1:4	
APPROVED		COPYRIGHT © 2007 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.		
DE APPR.				
DATE	08.01.07			

w/g 61004

TRANSFER DRILL Ø0.129 (#30 DRILL)  
FROM D3651-5/-7 TO D3651-3  
INSTALL CR3523-4-02 OR NAS9307M-4-02  
RIVETS (57)

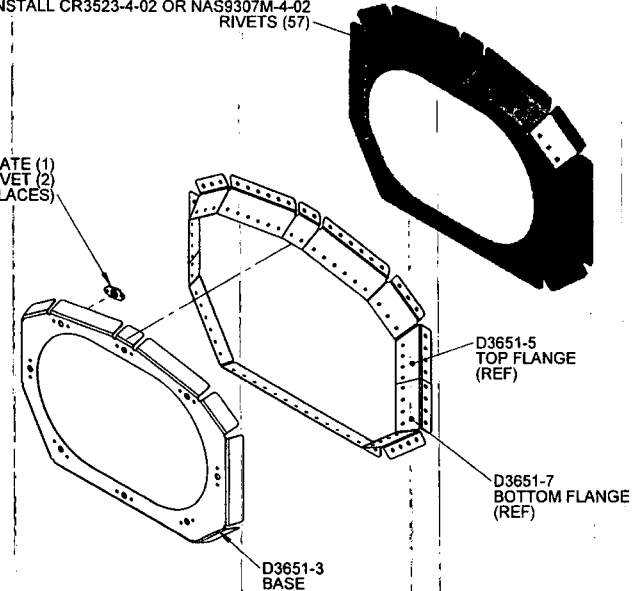


# **D3651-043 FLANGE WELDMENT**

## **D3651-043 NOTES:**

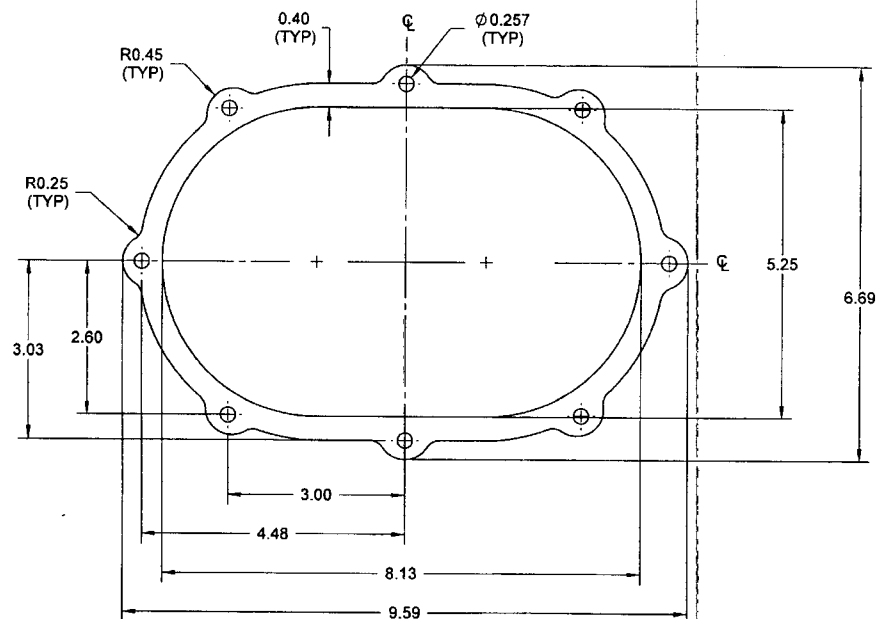
- 1) WELD PER QSI 004
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.76 lbs

MS21060-3K NUTPLATE (1)  
MS20427M3-3 RIVET (2)  
(8 PLACES)



QTY -043	PART NUMBER	DESCRIPTION
X	D3651-043	FLANGE WELDMENT
1	D3651-3	BASE
1	D3651-5	TOP FLANGE
1	D3651-7	BOTTOM FLANGE
16	MS20427M3-3	RIVET
8	MS21060-3K	NUTPLATE
57	CR3523-4-02 or NAS9307M-4-02	RIVET

DESIGN	RF	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED	LE	DRAWING NO.	REV. B
MFG. APPR.	MA	D3651	SHEET 2 OF 9
APPROVED	MA	TITLE	SCALE
DE APPR.	MA	AFT BASE ASSEMBLY	1:3
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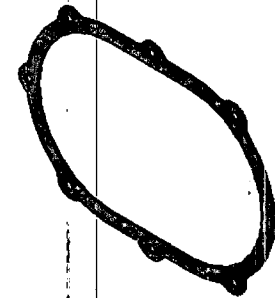
**D3651-1 GASKET**

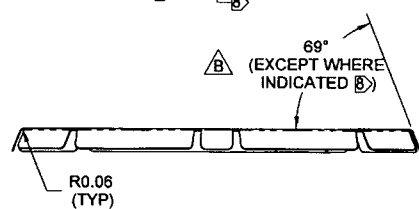
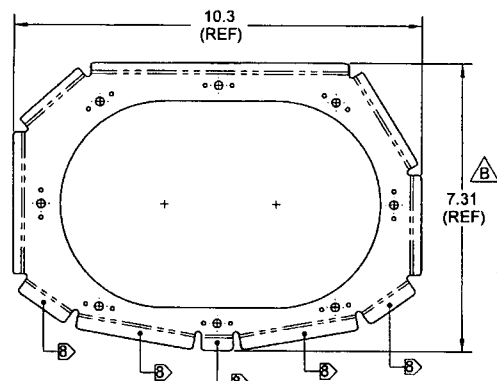
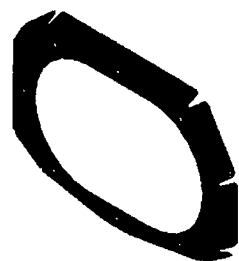
**NOTES:**

- 1) MATERIAL: THERMO-CHEM P/N G-89, (REF. 0.060 THICK)  
POSSIBLE SUPPLIER: A.R. THOMSON GROUP
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) PART IS SYMMETRIC ABOUT  $\phi$
- 8) WEIGHT: 0.09 lbs

61004

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DRAWN	RF		
CHECKED	ME	DRAWING NO.	REV. B
MFG. APPR.	ME	D3651	SHEET 3 OF 9
APPROVED	ME	TITLE	SCALE
DE APPR.	ME	AFT BASE ASSEMBLY	1:2
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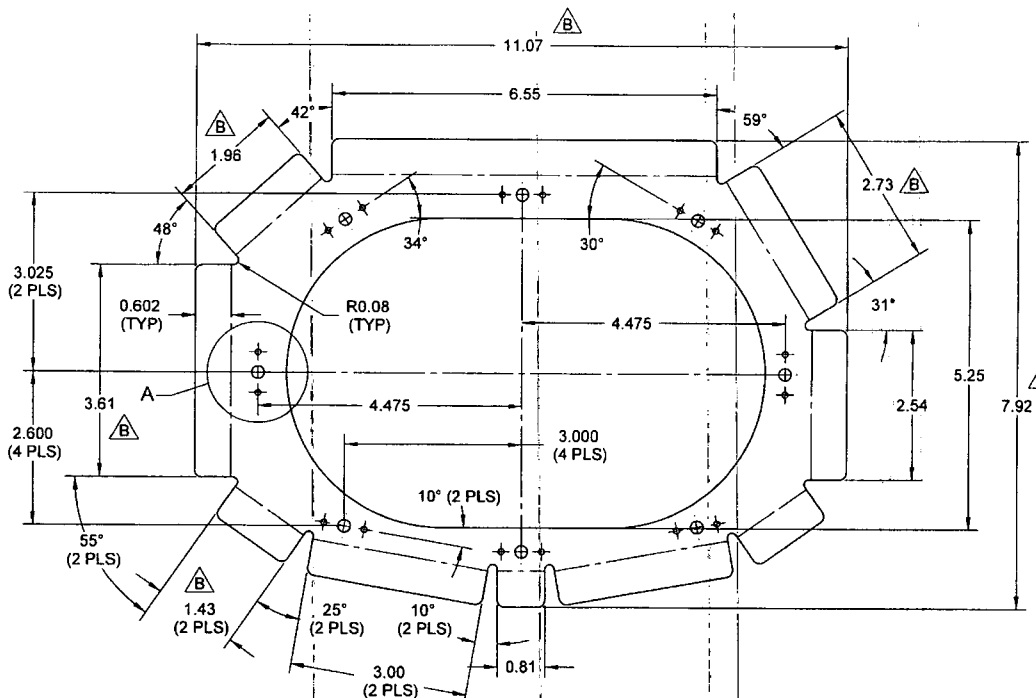




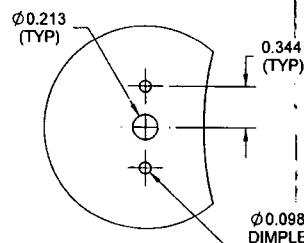
**D3651-3 BASE**  
(MAKE FROM D3651-3F FLAT PATTERN)

**NOTES:**

- 1) MATERIAL: AISI 304/316 STAINLESS STEEL 0.018 (26 GAUGE) SHEET, PER MIL-S-5019 (REF. DART SPEC. M304S26GA)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.27 lbs
- 8) BEND TO 55° WHERE INDICATED



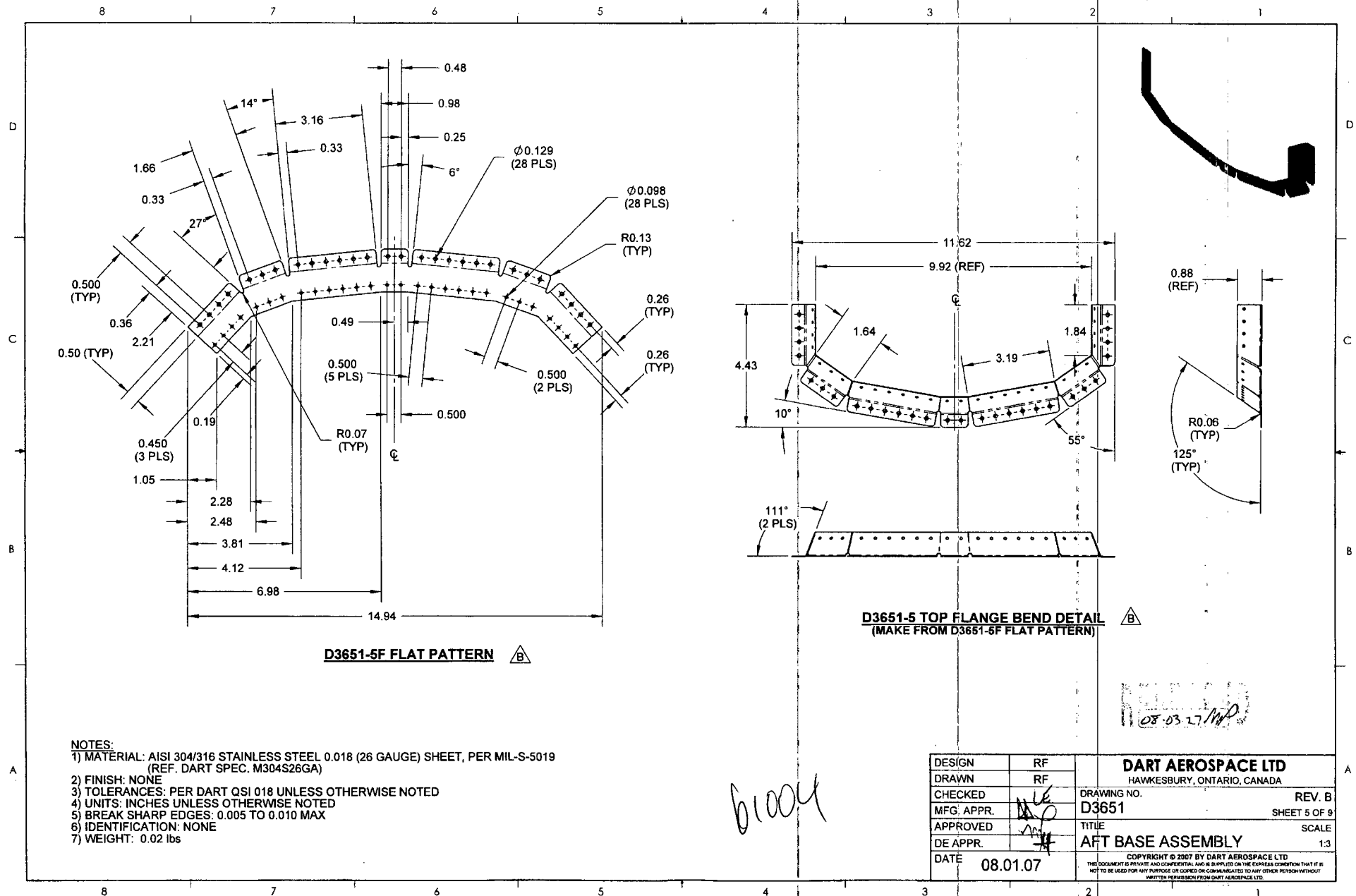
**D3651-3F FLAT PATTERN**

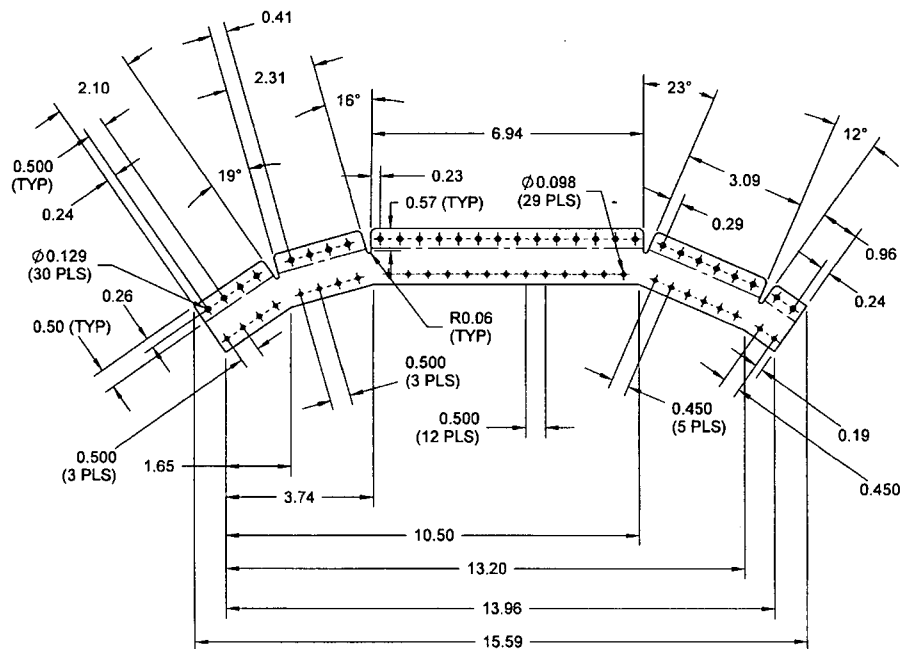


**DETAIL A**

Ø0.098 (TYP)  
DIMPLE HOLES  
FOR MS20427M3  
RIVET

DESIGN	RF	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED	KE	DRAWING NO. <b>D3651</b>	REV. B
MFG. APPR.	ME		SHEET 4 OF 8
APPROVED	ME	TITLE <b>AFT BASE ASSEMBLY</b>	SCALE
DE APPR.	ME		1:2
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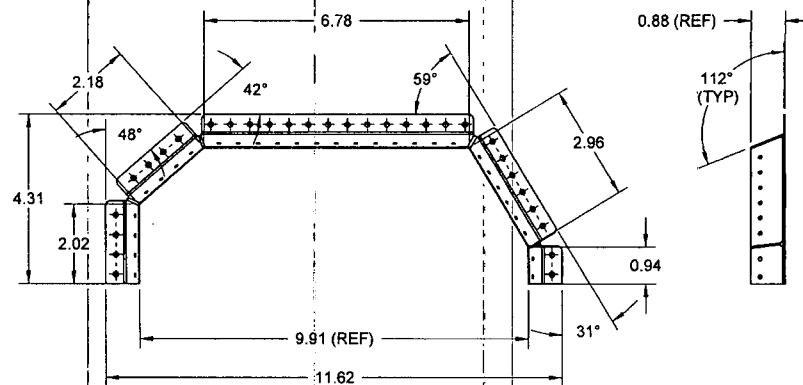




**D3651-7F FLAT PATTERN** B

**NOTES:**

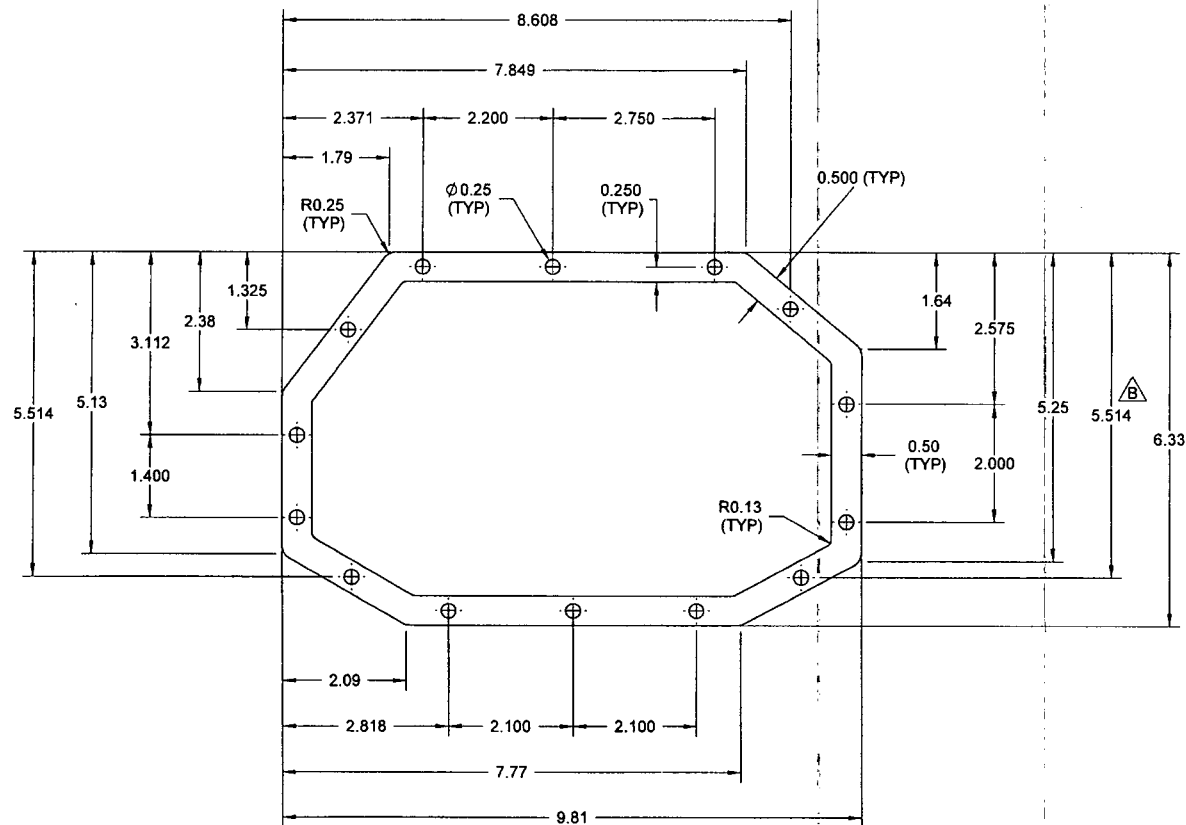
- 1) MATERIAL: AISI 304/316 STAINLESS STEEL 0.018 (26 GAUGE) SHEET, PER MIL-S-5019 (REF. DART SPEC. M304S26GA)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.02 lbs



**D3651-7 BOTTOM FLANGE BEND DETAIL** B  
(MAKE FROM D3651-7F FLAT PATTERN)

08-03-27 MP

DESIGN	RF	<b>DART AEROSPACE LTD</b>	
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA	
CHECKED	RF	DRAWING NO.	REV. B
MFG. APPR.	RF	D3651	SHEET 6 OF 9
APPROVED	RF	TITLE	SCALE
DE APPR.	RF	AFT BASE ASSEMBLY	1:3
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**D3651-9 INSIDE DOUBLER**

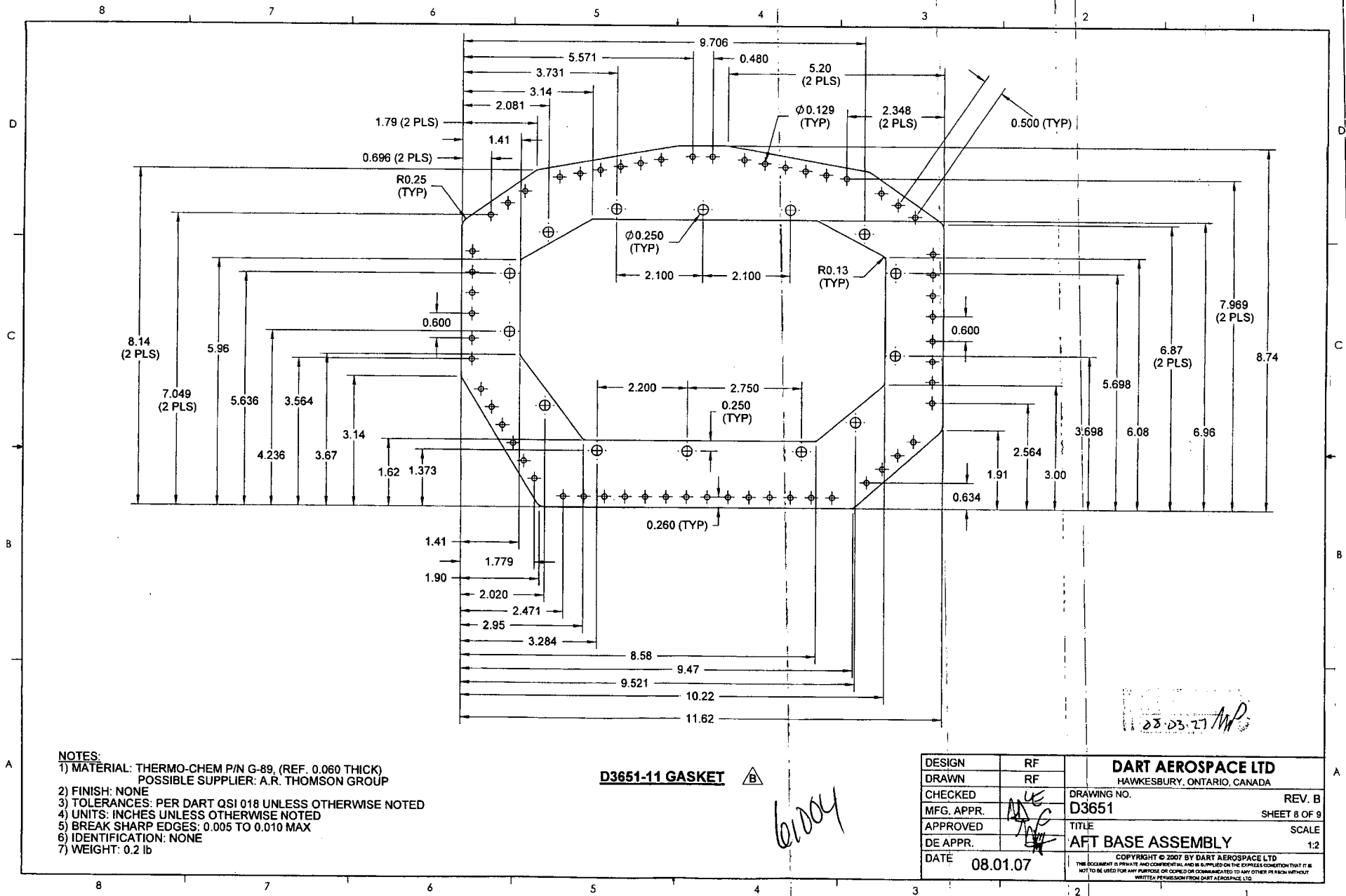
**NOTES:**

- 1) MATERIAL: AISI 304/316 STAINLESS STEEL 0.018 (26 GAUGE) SHEET, PER MIL-S-5019 (REF. DART SPEC. M304S26GA)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.07 lbs

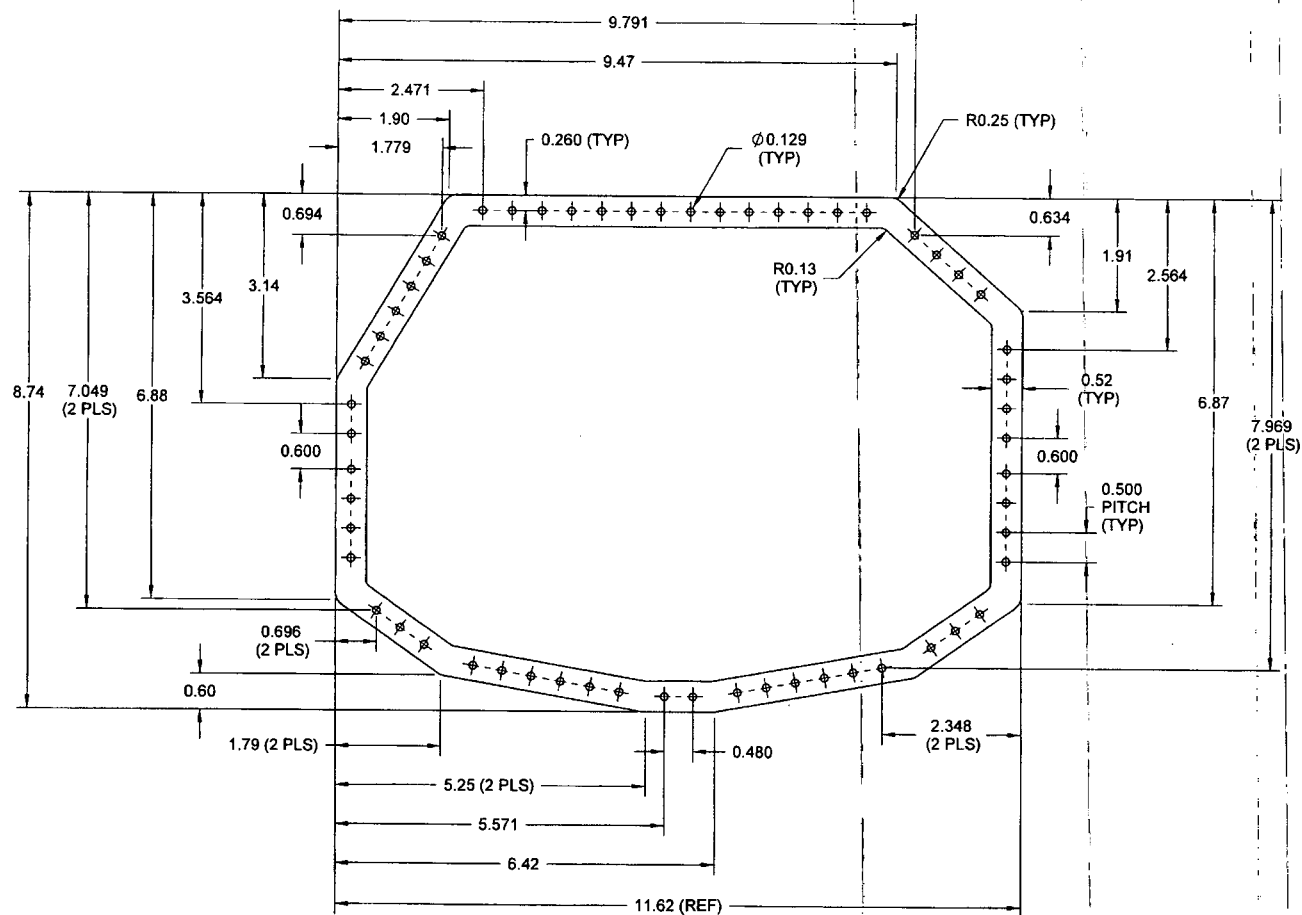
*61004*

DESIGN	RF	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED	<i>KE</i>	DRAWING NO.	REV. B
MFG. APPR.	<i>KE</i>	D3651	SHEET 7 OF 8
APPROVED	<i>KE</i>	TITLE	SCALE
DE APPR.	<i>KE</i>	AFT BASE ASSEMBLY	1:2
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*08-03-27*







# **D3651-13 OUTSIDE DOUBLER**

## **NOTES:**

- 1) MATERIAL: AISI 304/316 STAINLESS STEEL 0.018 (26 GAUGE) SHEET, PER MIL-S-5019 (REF. DART SPEC. M304S26GA)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.10 lbs

DESIGN	RF	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED	ME	DRAWING NO.	REV. B
MFG. APPR.	ME	D3651	SHEET 9 OF 9
APPROVED	ME	TITLE	SCALE
DE APPR.	ME	AFT BASE ASSEMBLY	1:2
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